Nov. 11, 1969 L. R. CHANDOS 3,477,158

DISPLAY BANNERS

Filed Jan. 29, 1968

Fig. 1.

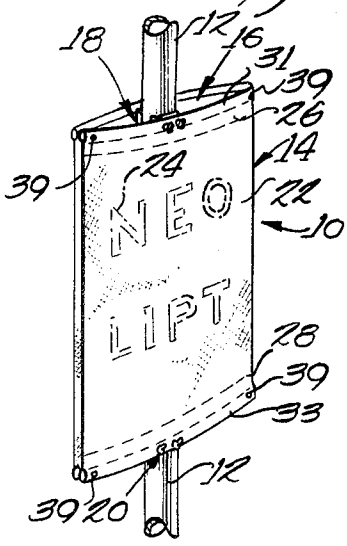


Fig. 2.

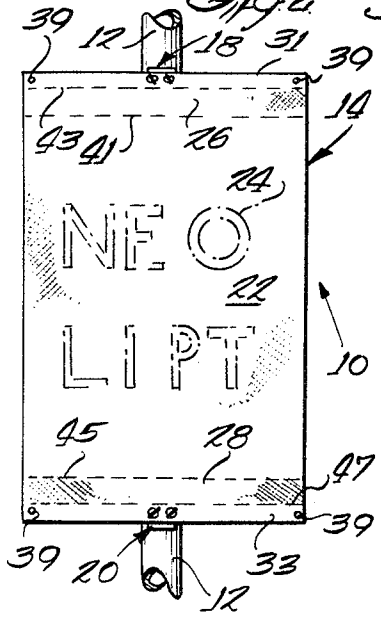


Fig. 3

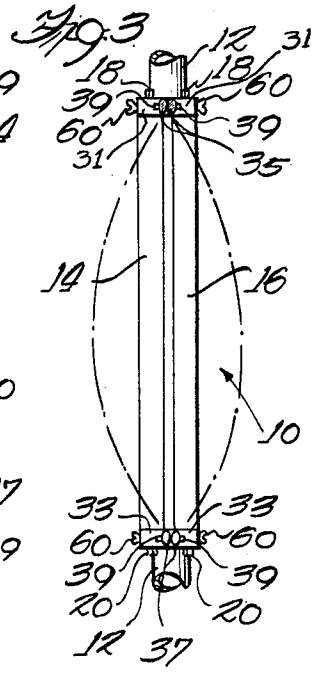


Fig. 4

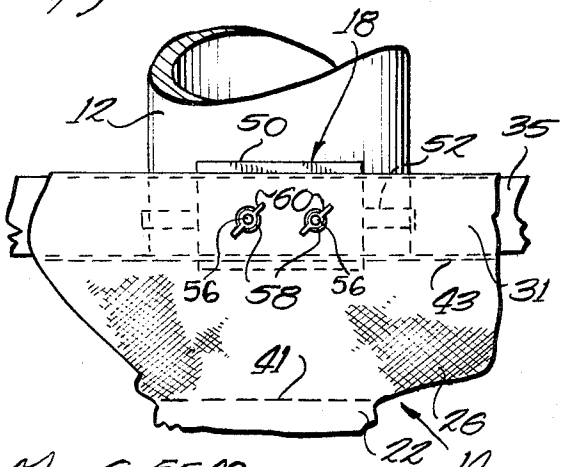


Fig. 5

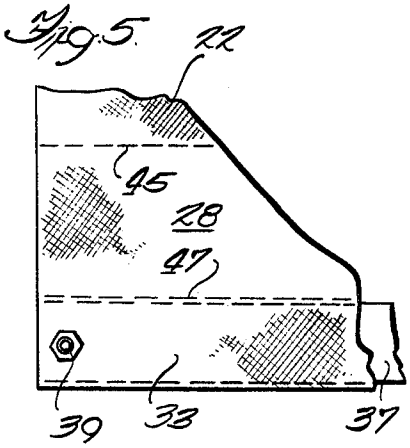
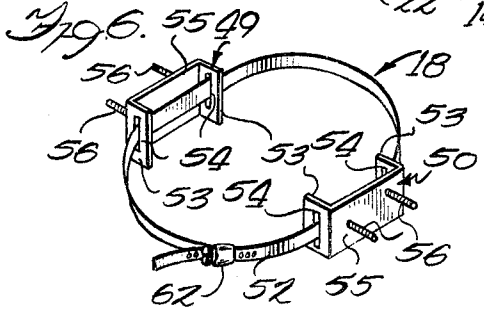


Fig. 6.



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DISPLAY BANNERS

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U.S. Cl. 40—128 8 Claims

ABSTRACT OF THE DISCLOSURE

A display banner includes a flexible panel for receiving advertising material, a pair of sleeves forming two oppositely-disposed marginal edges at the top and bottom of the banner, and a pair of elastic strips extending across the banner between the panel and the sleeves. The sleeves receive battens which are attachable to a pole by means of a mounting device with the elastic strips maintained in a stretched condition.

BACKGROUND OF THE INVENTION

This invention generally relates to display banners of new and improved construction and it more particularly relates to the type of advertising banner which includes a pair of parallel flexible panels mounted on opposite sides of a pole.

The prior art types of banner constructions have the disadvantages that when used out of doors for advertising purposes they are easily torn or otherwise damaged by the wind, which also tends to stretch and thereby distort the printed material thereon. Various types of devices have been developed to alleviate this problem including spring loaded mounting assemblies to hold the banner panels under resilient tension. Such mounting arrangements do not, however, uniformly tension the banner panels whereby there is still a tendency for the panels to tear under normal weather conditions such as wind and rain where the panel material is weakened and subjected to stretching.

SUMMARY OF THE INVENTION

Therefore, it is the principal object of the present invention to provide a new and improved banner construction.

Another object of the present invention is to provide an improved banner construction which protects the banner from wind damage by preventing the banner panels from tending to rip, distort or tear due to wind forces under normal weather conditions.

Briefly, the above and further objects are realized in accordance with the present invention by providing a banner construction in which a pair of rigid members form oppositely disposed marginal edges of a flexible banner panel and in which at least a portion of the banner panel is composed of a resilient webbing that extends across the face of the panel parallel to the rigid members. The rigid members are adapted to be attached to an upright pole in a spaced relationship to one another to maintain the webbing in a stretched condition, thereby applying a uniform resilient tension to the banner panel. As a result of this construction, the banner panel is tensioned uniformly and resiliently across its face between the rigid members. Such a banner construction is not only easily manufactured and installed, but also it provides a superior protection against the prevailing weather conditions, such as strong winds and intense heat from the sun. Accordingly, a gust of wind merely tends to stretch the resilient webbing, and therefore, protection against tearing or deterioration of the banner panel is thereby provided.

BRIEF DESCRIPTION OF THE DRAWINGS

These and further objects of the present invention are described more fully and completely in the following detailed description when considered with reference to the accompanying sheet of drawings wherein:

FIGURE 1 is a perspective view of a display banner attached to a pole (partially broken away) in accordance with the present invention;

FIGURE 2 is an enlarged elevational view of FIG. 1;

FIGURE 3 is a side elevational view of FIG. 2, indicating with broken lines the manner in which the banner is able to billow in the wind without becoming damaged;

FIGURE 4 is an enlarged view of a portion of FIG. 2 illustrating the banner mounting assembly and the resilient webbing portion of the banner;

FIGURE 5 is an enlarged view of a corner portion of FIG. 2 illustrating a portion of the elastic webbing and sleeve for the banner; and

FIGURE 6 is a perspective view of one of the banner mounting assemblies.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to FIG. 1, there is shown a display banner **10** mounted on an upright pole **12**, which may be of the type found at gasoline filling stations and the like, for displaying advertisements. The display banner **10** comprises as its principal elements a pair of parallel-disposed display panels **14** and **16** which are identically constructed and secured on opposite sides of the pole **12** by means of an upper mounting assembly **18** and a lower mounting assembly **20**. Since the banners **14** and **16** face opposite directions, they can be viewed from two different directions.

Each of the banner panels **14** and **16** generally comprises a central portion **22** suitably composed of a textile fabric or plastic having advertising printing **24** on its face; upper and lower resilient portions **26** and **28** composed preferably of an elastic webbing; and a pair of sleeves **31** and **33** adjacent the resilient portions **26** and **28**, respectively, and forming the upper and lower marginal edges, respectively, of the banner panel. The sleeves **31** and **33** receive respective battens **35** and **37** formed of a rigid material such as wood, (see FIGS. 3–5), to produce a two-sided frame for the banner panel.

In order to mount the display banner, the mounting assemblies **18** and **20** are first attached to the pole **12** in a spaced-apart relationship at a distance which is slightly greater than the length of the banner panels **14** and **16**. The center portion of the upper battens **35** for the banners **14** and **16** are secured to opposite sides of the pole **12** by means of the upper mounting assembly **18**, and then the banner panels **14** and **16** are stretched and attached to the lower mounting assembly **20** so that the resilient portions **26** and **28** can be maintained in a stretched condition to resiliently and uniformly tension the central portion **22**. The corners of the upper and lower battens **35** and **37** may then be bolted together by means of nuts and bolts **39**, thereby causing the battens to be bowed about their mid points. If desired, the corners may be left unjoined.

Referring now to FIGS. 2 to 5, the resilient strips **26** and **28** are each in the form of a band of elastic webbing such as the well-known elastic material, lycra. The upper webbing **26** is sewn to the upper marginal edge of the central portion **22** along the line **41**, and the upper sleeve **31** is sewn to the upper webbing **26** along the line **43**. In like manner, the lower webbing **28** is sewn to the lower edge of the central portion **22** along the line **45**, and the upper edge of the lower sleeve **33** is sewn to the lower edge of the webbing **28** along the line **47**.

As best shown in FIGS. 3, 4 and 6, the upper mounting assembly **18**, which is identical to the lower mounting

assembly **20**, is illustrated and comprises a pair of channel-shaped brackets **49** and **50** which can be clamped on opposite sides of the pole **12** by means of a flexible metal strap **52**. Each of the brackets includes a pair of depending side flanges **53** each having a slot **54** for receiving the strap **52**, and a mounting face **55** having a pair of outwardly extending threaded studs **56** that serve as a fastening means for connecting the banner battens to the bracket. Accordingly, the studs **56** are adapted to extend through aligned holes in the sleeve and the batten of the banner. In order to fasten the batten to the bracket, a pair of washers **58** are slipped over the studs **56** (FIG. 4) which extend through the aligned holes in the sleeve and batten, and a pair of wing nuts **60** (FIGS. 3 and 4) are then tightened to fasten the batten to the clamp. The strap **52** secures the brackets **49** and **50** to the pole **12** by means of a conventional clamping or tightening device **62**.

MOUNTING PROCEDURE

In order to mount the banners **14** and **16** on the pole **12**, the mounting assemblies **18** and **20** are first attached to the pole **12** in a spaced relationship by a distance slightly greater than the length of the banner panels **14** and **16**. For this purpose, the strap **52** is threaded through the slots **54** in the brackets **49** and **50** of the upper mount **18**, and then the clamps **49** and **50** are attached to opposite sides of the pole **12**. The clamping device **62** causes the strap **52** to securely hold the clamps **49** and **50** in fixed engagement with the pole **12**. The upper battens **35** of the banner panels **14** and **16** are then secured. to the upper mounting assembly **18**. For this purpose, the aligned holes in the battens and the sleeves **31** are placed over the threaded studs **56** of the clamps **49** and **50**. The washers **58** are then slipped over the studs **56**, and the wing nuts **60** are tightened to fasten the battens to the clamps. In order to tension the banner panels **14** and **16** so that their surfaces are smooth, the banner panels **14** and **16** are stretched downwardly and the lower battens **37** of the banner panels **14** and **16** are then secured to the lower mounting assembly **20** to maintain the resilient portions **26** and **28** of the banner panels **14** and **16** in a stretched condition. The stretched resilient webbings **26** and **28** provide a uniform resilient tension for the central portion **22** of the banner panels **14** and **16**. For example, when the central portion **22** is composed of cloth, each vertical thread of the cloth is subjected to the same amount of resilient tension as each other vertical thread. When the wind blows the banner panels **14** and **16**, the elastic webbings resiliently deform and billow in the wind, as indicated by the broken lines in FIG. 3, without tearing or ripping the central portion **22**. Should rain cause the cloth portion **22** to shrink or stretch, the portion **22** would not become torn or ripped, because the elastic webbings **26** and **28** would stretch or contract to accommodate the corresponding change in size of the cloth portion **22**. For the purpose of providing the banner **10** with an attractive appearance, the corners of the upper and lower battens **35** for the banners **14** and **16** may be fastened together by the bolts **39** which extend through aligned holes in the sleeves and battens. Since the banner panels **14** and **16** are uniformly tensioned, fastening the corners together causes the side edges of the panels **14** and **16** to become taut, thereby minimizing the area at the sides of the banner **10** through which wind can enter and shake the banner panels **14** and **16**.

In view of the foregoing discussion, it should be readily apparent that the banner construction of the present invention enables a banner panel to be maintained in a state of uniform resilient tension. The banner panel can stretch and deform resiliently to a relatively great extent without becoming torn or damaged as a result of wind forces. In that regard, a gust of wind would merely cause the mounted banner panel of the present invention to billow and stretch, as indicated by the broken lines in FIG. 3, without damaging the banners.

While there have been shown and described and pointed out the fundamental novel features of the invention, it will be understood that various omissions and substitutions and changes in the form and details of the device illustrated and in its operation may be made by those skilled in the art, without departing from the spirit of the invention. It is the intention, therefore, to be limited only as indicated by the scope of the following claims.

I claim:

1. A display banner adapted to be mounted on an upright pole comprising:

a flexible panel having a pair of rigid members forming oppositely disposed marginal edges thereof and having a resilient webbing forming at least a portion thereof and extending across the face of the panel in a direction parallel to said marginal edges; and

securing means adapted to secure said rigid members to said pole in a spaced relationship to maintain said resilient webbing in a stretched condition, thereby uniformly tensioning the panel.

2. A display banner according to claim **1**, wherein said resilient webbing is composed of lycra.

3. A display banner according to claim **1**, wherein said webbing is in the form of a strip of elastic material adjacent one of said marginal edges of said banner panel, and wherein said banner further includes a second resilient webbing in the form of another strip of elastic material adjacent an opposite marginal edge of said banner panel.

4. A display banner according to claim **3**, further including a pair of sleeves connected to the resilient webbings for receiving the rigid members.

5. A display banner according to claim **4**, wherein said securing means further includes a pair of mounting assemblies adapted to fasten said rigid members to said pole in a spaced-apart relationship to maintain said resilient webbings in a stretched condition.

6. A display banner according to claim **5**, wherein said mounting assemblies each comprises a strap and a pair of channel-shaped brackets for engaging opposite sides of said pole, each of said brackets including slotted, depending side flanges for receiving the strap to attach the bracket to the pole and fastening means connected to the mounting face of each bracket to detachably connect the rigid members to the brackets.

7. A display banner according to claim **1**, further including another flexible panel having a pair of rigid members forming oppositely-disposed marginal edges thereof and having a resilient webbing forming at least a portion thereof and extending across the face of the panel in a direction parallel to the last-mentioned marginal edges; and

said securing means means adapted to secure said other banner panel to an opposite side of said pole in a parallel relationship with the first-mentioned panel, said securing means being adapted for securing said oppositely-disposed rigid members of said other banner panel to said pole in a spaced relationship to maintain the webbing of said other banner panel in a stretched condition.

8. A display banner according to claim **7**, further including means for fastening each of the corner portions of the rigid members of one of the banner panels to each of the corresponding corner portions of the rigid members of the other banner.

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